REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1, 3, 9, 11 and 17-19 are amended. Claims 1-19 are pending.

I. Objection to the Claims

In the Office Action, at page 2, numbered paragraphs 1-3, claims 9, 11, 18 and 19 were objected to. Claims 9, 11, 18 and 19 are amended in light of the Examiner's comments, and accordingly, withdrawal of the objection to the claims is respectfully requested.

II. Rejection under 35 U.S.C. § 102

In the Office Action, at page 2, numbered paragraph 5, claims 1-7 and 15-19 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Publication No. 2002/0126192 to Kawaguchi et al. This rejection is respectfully traversed because Kawaguchi does not discuss or suggest:

> a storage unit to store information about the position of the sheet at which a white line would be produced, wherein the storage unit stores the information regarding sheet size;...and
>
> a control unit to control a feeding rate of the feeding rollers using the information stored in the storage unit about the white line producing position of the sheet, wherein the sheet is fed at an initially set feeding rate starting when the sheet is detected to have reached the set reference position by the document position sensor until the white line would be produced, and the sheet is fed at a different feeding rate <u>less than</u> the initially set feeding rate starting from the time when the white line would be produced on the sheet,

as recited in amended independent claim 1.

Kawaguchi discusses a printing apparatus and printing method including a PE sensor lever, which is operated by the front end of a printing sheet P to detect the front end of the printing sheet P, and based on the result of the detection, a printing position on the printing sheet P can be determined. Kawaguchi further discusses that it is determined whether or not the back end of the print sheet P has slipped out from a nip portion. The position of the nip portion 940 is determined on the basis of the distance A from the reference position of the PE sensor level 35 to the nip portion 940. The control section in Kawaguchi determines whether or not a back end of the print sheet P has been released from the nip portion between the

transportation roller 36 and the pinch roller 37, on the basis of nip position information already stored in the storage means. If the control section determines that the back end has slipped out from the nip portion, the quantity of transportation for the print sheet P per operation which quantity is used immediately after the determination is set twice the quantity of transportation for the 6-pass printing.

First, Kawaguchi does not discuss or suggest that a storage unit stores information about the position of a sheet at which a white line would be produced and information regarding sheet size. The PE sensor in Kawaguchi detects a back end of the print sheet, but does not determine or store information regarding sheet size.

Further, Kawaguchi does not discuss or suggest storing information about the position of the sheet at which a white line would be produced. Kawaguchi discusses that the position of a nip portion 940 is determined on the basis of the distance A from the reference position of the sensor lever 35 to the nip portion 940. Kawaguchi does not suggest that the position of the nip portion 940 which is found is a position of the sheet P at which a white line would be produced. Kawaguchi discusses that since the distance between the PE sensor lever 35 and the nip 940 varies among printing apparatuses, accurate nip position information needs to be determined. Thus, Kawaguchi is not suggestive of storing information about the position of the sheet at which a white line would be produced, but merely discusses finding the position of the nip portion 940, based on the distance A from the reference position to the nip portion 940.

Additionally, Kawaguchi does not discuss or suggest that the sheet P is fed at a different feeding rate less than an initially set feeding rate starting from a time when the white line would be produced on the sheet. Kawaguchi discusses that the control section determines whether the back end of the print sheet P has been released from the nip portion between the transportation roller 36 and the pinch roller 37, on the basis of the nip position information. Kawaguchi further discusses that if the control section determines that the back end has slipped out from the nip portion, the quality of transportation for the print sheet P per operation which quantity is used immediately after the determination is set twice the quality of transportation. Thus, Kawaguchi does not suggest that the sheet P is fed at a feeding rate which is less than an initially set feeding rate starting from time when the white line would be produced on the sheet P.

Therefore, as Kawaguchi does not discuss or suggest "a storage unit to store information about the position of the sheet at which a white line would be produced, wherein the storage unit stores the information regarding sheet size;...and a control unit to control a feeding rate of the feeding rollers using the information stored in the storage unit about the white line producing

position of the sheet, wherein the sheet is fed at an initially set feeding rate starting when the sheet is detected to have reached the set reference position by the document position sensor until the white line would be produced, and the sheet is fed at a different feeding rate less than the initially set feeding rate starting from the time when the white line would be produced on the sheet," as recited in amended independent claim 1, claim 1 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Further, Kawaguchi does not discuss or suggest:

> storing information via a storage unit regarding sheet sizes of a sheet of paper and information in relation to position of the sheet of paper at which a white line would be produced;...and
>
> upon detecting that the sheet has reached the set reference position, controlling a sheet feeding rate by using the information in relation to a position of the sheet at which the white line would be produced depending on the sheet size information,

as recited in independent claim 4.

Kawaguchi does not discuss or suggest that information regarding sheet sizes of a sheet of paper is stored. Kawaguchi discusses only determining a reference position of the PE sensor lever 35, but does not suggest that information regarding the size of the sheet of paper P is stored.

Further, Kawaguchi does not discuss or suggest storing information in relation to position of the sheet of paper at which a white line would be produced. Kawaguchi does not suggest that information in relation to a position of a sheet of paper, the size of which has been stored, is also stored. Kawaguchi does not suggest correlating a position at which a white line would be produced and a sheet size of the sheet of paper. Kawaguchi discusses only that a position of a nip portion 940 is determined based on a distance A from a reference position to the nip portion 940, but Kawaguchi does not suggest that information about a sheet size of a sheet of paper and information about the position of the sheet of paper at which a white line of the sheet of paper having the stored sheet size would be produced.

Additionally, Kawaguchi does not discuss or suggest that upon detecting that the sheet has reached a set reference position, a sheet feeding rate is controlled by using the information in relation to a position of the sheet at which the white line would be produced **depending on the sheet size information**. The quantity of rotations of the transportation roller in Kawaguchi is not set to be twice the quantity used before the determination that the back end of the sheet of

paper P has slipped out from the nip portion, by using information in relation to a position of the sheet at which a white line would be produced *depending on sheet size information*. Kawaguchi does not suggest that information in relation to a position of the sheet at which the white line would be produced is dependent on stored sheet size information and does not suggest that a sheet feeding rate is controlled based on such information.

Therefore, as Kawaguchi does not discuss or suggest "storing information via a storage unit regarding sheet sizes of a sheet of paper and information in relation to position of the sheet of paper at which a white line would be produced;...and upon detecting that the sheet has reached the set reference position, controlling a sheet feeding rate by using the information in relation to a position of the sheet at which the white line would be produced depending on the sheet size information," as recited in independent claim 4, claim 4 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Also, Kawaguchi does not discuss or suggest "driving the sheet along the sheet feeding path upon determining that the sheet has reached the set reference position in accordance with an initially set feeding rate; and decreasing the initially set feeding rate for a predetermined period of time starting from a time when the white line would be produced on the sheet," as recited in amended independent claim 17, claim 17 patentably distinguishes over the reference relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Claims 2, 3, 5-7, 15, 16, 18 and 19 depend either directly or indirectly from independent claims 1, 4 and 17 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 3 recites that "the control unit controls the feeding rate of the feeding rollers such that the sheet is fed at the feeding rate of the feeding rollers less than the initially set feeding rate for a predetermined period of time starting from the time when the white line would be produced on the sheet." Therefore, claims 2, 3, 5-7, 15, 16, 18 and 19 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

III. Rejection under 35 U.S.C. § 103

In the Office Action, at page 7, numbered paragraph 19, claims 8-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawaguchi in view of U.S. Patent No. 6,741,372 to Murakami. This rejection is respectfully traversed because the combination of the teachings of Kawaguchi and Murakami does not suggest:

> a storage unit to store information in relation to a position at which a white line would be produced in accordance with the size of a sheet of paper;...[and]
>
> a control unit to check if information regarding the size of the sheet queuing to print is input through the input part, and upon determining that information on the size of the sheet is input, the control unit uses the size information to recognize a position of the sheet at which a white line would be produced,

as recited in independent claim 8.

As discussed above, Kawaguchi does not discuss or suggest that information in relation to a position at which a white line would be produced in accordance with a size of a sheet of paper is stored. Further, Kawaguchi does not discuss or suggest that a control unit checks if information regarding the size of the sheet queuing to print is input and that the control unit uses the size information to recognize a position of the sheet at which a white line would be produced. Kawaguchi does not use size information of the sheet of paper P which has previously been stored to recognize a position of a sheet at which a white line would be produced.

Murakami fails to make up for the deficiencies in Kawaguchi.

Therefore, as the combination of the teachings of Kawaguchi and Murakami does not suggest "a storage unit to store information in relation to a position at which a white line would be produced in accordance with the size of a sheet of paper;...[and] a control unit to check if information regarding the size of the sheet queuing to print is input through the input part, and upon determining that information on the size of the sheet is input, the control unit uses the size information to recognize a position of the sheet at which a white line would be produced," as recited in independent claim 8, claim 8 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Claims 9-14 depend either directly or indirectly from independent claim 8 and include all the features of claim 8, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 13 recites that "the control unit stops driving the line feed motor for a predetermined period of time starting from the time when the white line would be produced on the sheet." Therefore, claims 2, 3, 5-7, 15, 16, 18 and 19 patentably distinguish over the references relied upon for at least the reasons noted above. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Conclusion

In accordance with the foregoing, claims 1, 3, 9, 11 and 17-19 have been amended. Claims 1-19 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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